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Lightning striking point determination method for optical fibre transmission line in optic communication - involves determining lightning striking point based on time difference between two polarisation fluctuations and momentary variation speed obtained accordir to stokes parameter

DENRYOKU CI IUO KENKYUSI IO 96.11.15 96JP-318597 S01 (98.06.02) G01R 31/08

The method involves transmitting a light signal through a first optical fibre of a optical transmission line (11) which includes overhead composite optical fibres (12) an a ground wire. The optical fibres at the receiving end of the optical transmission as short-circuited such that the light signal is returned to the transmitting end of the optical transmission line.

The fluctuation of polarisation of the returned light signal is detected as a stoke parameter. A momentary variation speed is obtained based on the stokes parameter. lightning striking point is determined according to the time difference between two polar isation fluctuations and the obtained momentary variation speed.

ADVANTAGE - Ensures accurate and simple detection of lightning striking poin on optical transmission line. Enables full automation of lightning striking point deter mination process. Ensures immediate inspection and repair of transmission line portion damaged by lightning, thus shortening service interruption time. (6pp Dwg.No.1/8) N98-291673 X12-G01D X12-G01)